

# SAFETY DATA SHEET



## OXYVINYLS® PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.: 05

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Company Identification:**

Oxy Vinyls, LP  
5005 LBJ Freeway  
Suite 500, LB 30  
Dallas, Tx 75244-6123

**24 Hour Emergency Telephone Number:**

1-800-733-3665 or 1-972-404-3228 (U.S.); 32.3.575.55.55 (Europe);  
1800-033-111 (Australia)

**To Request an MSDS:  
Customer Service:**

MSDS@oxy.com or 1-972-404-3245  
1-800-752-5151 or 1-972-404-3700

**Trade Name:**

OxyVinyls® 155, 155F, 185, 185F, 190F, 195, 195F, 200, 200F, 216, 216A, 216S,  
220, 220F, 225, 225A, 225P, 226, 226F, 240, 240F, 240TH, 255, 255F, 280, 310,  
355, 450F, 500, 500F

**Synonyms:**

Polyvinyl chloride

**Product Use:**

Vinyl fabrication

### 2. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW:

**Color:**  
**Physical State:**  
**Appearance:**  
**Signal Word:**

White  
Solid  
Powder, Granular  
WARNING

**MAJOR HEALTH HAZARDS:** FUMES PRODUCED IN PROCESSING MAY IRRITATE RESPIRATORY TRACT, SKIN AND EYES. POLYVINYL CHLORIDE CONTAINS VINYL CHLORIDE. VINYL CHLORIDE IS A CANCER-SUSPECT AGENT.

**PRECAUTIONARY STATEMENTS:** Avoid breathing dust. Avoid contact with skin, eyes and clothing. Keep container tightly closed. Wash thoroughly after handling. Use only with adequate ventilation.

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## 2. HAZARDS IDENTIFICATION

### POTENTIAL HEALTH EFFECTS:

**Inhalation:** May cause irritation.

**Skin contact:** May cause mechanical irritation.

**Eye contact:** May cause mechanical irritation.

**Ingestion:** To our knowledge, no effects are known.

**Target Organs Effected:** Respiratory System

**Chronic Effects:** Chronic exposure to the respirable fraction (particles less than 10 microns in size) of PVC particles, may produce pulmonary fibrosis. Particle sizes associated with suspension polymerization are typically greater than 10 microns in size. Product contains residual amounts of VCM (concentrations less than 10 ppm).

See Section 11: TOXICOLOGICAL INFORMATION

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component	Concentration (by weight %)	CAS No.
Ethene, chloro-, homopolymer (PolyVinyl Chloride)	100	9002-86-2

## 4. FIRST AID MEASURES

**INHALATION:** If adverse effects occur, remove to uncontaminated area. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

**SKIN CONTACT:** Wash contaminated areas with soap and water. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

**EYE CONTACT:** Flush eyes with plenty of water for at least 15 minutes. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

**INGESTION:** No hazard expected. IF LARGE AMOUNTS ARE INGESTED, GET MEDICAL ATTENTION.

## 5. FIRE-FIGHTING MEASURES

**Fire Hazard:** Slight fire hazard. Although unlikely, dust/air mixtures may pose a limited risk of explosion under certain conditions (see Section 7).

# **OXYVINYLSE PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)**

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.: 05

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## **5. FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Use extinguishing agents appropriate for surrounding fire.

**Fire Fighting:** Keep unnecessary people away, isolate hazard area and deny entry. Move container from fire area if it can be done without risk. Wear NIOSH approved positive-pressure self-contained breathing apparatus operated in pressure demand mode. Cool extinguished material to prevent decomposition.

**Sensitivity to Mechanical Impact:** Not sensitive.

**Sensitivity to Static Discharge:** Electrostatic charges may build up during handling. Ground equipment.

**Flash point:** 736 (°F) 391 (°C)

**Method:** ASTM D1929

**Autoignition Temperature:** 849 (°F) 454 (°C)

**Hazardous Combustion Products:** Hydrogen chloride, oxides of carbon, small amounts of benzene and aromatic and aliphatic hydrocarbons and Phosgene

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## **6. ACCIDENTAL RELEASE MEASURES**

### **Occupational Release:**

Eliminate all sources of ignition. To minimize dust, vacuum cleaning is preferred. Collect spilled material in appropriate container for disposal. Keep product and flush water out of water supplies and sewers. Releases should be reported, if required, to appropriate agencies.

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## **7. HANDLING AND STORAGE**

**Storage Conditions:** Store and handle in accordance with all current regulations and standards. Keep container tightly closed and properly labeled. Store in a cool, dry area. Store in a well-ventilated area. Avoid heat, flames, sparks and other sources of ignition. Ground equipment.

**Handling Procedures:** Use methods to minimize generation of dust. PVC dust is capable of propagating a secondary dust explosion. This potential can be reduced by good housekeeping, prevention of dust from process equipment, preventing accumulation of dust on overhead, horizontal surfaces and eliminating potential ignition sources. Avoid breathing dust. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. PVC resin processing may result in the release of low levels of vinyl chloride. Use only in well-ventilated areas.

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# OXY VINYL SO PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.: 05

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### OSHA Regulatory Exposure Limit(s):

Hazardous Component	CAS - No.	OSHA Final PEL TWA	OSHA Final PEL STEL	OSHA Final PEL Ceiling
Ethene, chloro-, homopolymer (PolyVinyl Chloride) listed as Particulate Not Otherwise Classified (PNOC)	9002-86-2	15 mg/m3 total dust; 5 mg/m3 respirable fraction.		

### Non-Regulatory Exposure Limit(s):

The Non-Regulatory OSHA limits shown in the table are the Vacated 1989 PEL's (Vacated by 58 FR 35338, June 30, 1993).

Hazardous Component	CAS - No.	ACGIH TWA	ACGIH STEL	ACGIH Ceiling	OSHA TWA (Vacated)	OSHA STEL (Vacated)	OSHA Ceiling (Vacated)
Ethene, chloro-, homopolymer (PolyVinyl Chloride)	9002-86-2	1 mg/m3 Respirable Particulate Matter	—	—	—	—	—

**Additional Advice:** The fabrication processes for the final product may involve coating, calendaring, and molding. To assess the health hazards associated with exposure to compounded PVC dusts, it may be necessary to have information on the ingredients used in the compounding of the resin.

**ENGINEERING CONTROLS:** Provide local exhaust ventilation where dust or vapors may be generated. Ensure compliance with applicable exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT:

**Eye Protection:** Safety glasses or goggles are recommended when there is a potential for eye contact.

**Skin and Body Protection:** Wear suitable protective clothing.

**Hand Protection:** Wear suitable gloves.

**Protective Material Types:** Polyvinyl chloride (PVC), Tyvek®

**Respiratory Protection:** A NIOSH approved respirator with N95 cartridges may be permissible under certain circumstances where airborne concentrations of dust are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. A respiratory protection program that meets 29 CFR 1910.134 must be followed whenever workplace conditions warrant use of a respirator.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid  
**Appearance:** Powder, Granular  
**Color:** White

# OXIVINYL<sup>®</sup> PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.:05

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Odor Threshold	No data available
Molecular Formula:	(C <sub>2</sub> H <sub>3</sub> Cl) <sub>n</sub>
Boiling Point/Range:	Not applicable
Melting Point/Range:	No data available
Vapor Pressure:	Not applicable
Vapor Density (air=1):	Not applicable
Specific Gravity (water=1):	1.4
Density:	1.4 gm/cm <sup>3</sup>
Water Solubility:	Negligible
pH:	Not applicable
Volatility:	Not applicable
Evaporation Rate (ether=1):	Not applicable
Partition Coefficient (n-octanol/water):	No data available

## 10. STABILITY AND REACTIVITY

Reactivity/ Stability:	Stable at normal temperatures and pressures.
Conditions to Avoid:	Avoid heat, flames, sparks and other sources of ignition.
Incompatibilities/ Materials to Avoid:	None known
Hazardous Decomposition Products:	Hydrochloric acid, carbon oxides, small amounts of benzene and aromatic and aliphatic hydrocarbons, Phosgene
Hazardous Polymerization:	PVC is a stable polymer and will not further polymerize. This material will not depolymerize to form VCM.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

This material is practically non-toxic by the oral route. This material is unlikely to cause chemical skin irritation. Mechanical irritation may occur. Eye irritation may occur from the mechanical action of lodged particles. Vinyl chloride monomer (VCM) is NOT likely to be present at levels that would produce an acute biological effect. Acute biological effects of VCM include CNS and respiratory depression.

### CHRONIC TOXICITY:

The available evidence from experimental animals and from humans indicates that pure PVC is not metabolized in mammals. Several studies have described pulmonary fibrosis from inhalation of high levels of respirable PVC particles. PVC resin particles generated by suspension polymerization are generally large enough in diameter that the majority are not considered respirable. Vinyl chloride monomer (VCM) is NOT likely to be present at levels that would produce a chronic biological effect. Chronic biological effects of VCM include damage to the liver, which causes angiosarcoma of the liver (a rare form of liver cancer in humans) and Raynaud's syndrome (bone loss in finger tips). Long latent period may exist between exposure and symptom onset.



# **OXYVINYLSE PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)**

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.: 05

## **11. TOXICOLOGICAL INFORMATION**

**CARCINOGENICITY:** This material is not classified as a carcinogen by NTP, IARC or OSHA.

## **12. ECOLOGICAL INFORMATION**

**AQUATIC TOXICITY:** No data available. This material is believed to be practically non-toxic to aquatic life.

### **FATE AND TRANSPORT:**

**BIODEGRADATION:** PVC will not biodegrade.

**PERSISTENCE:** This material will persist in the environment.

**BIOCONCENTRATION:** This material will not bioconcentrate.

**ADDITIONAL ECOLOGICAL INFORMATION:** This material is believed to be practically non-toxic to terrestrial organisms.

## **13. DISPOSAL CONSIDERATIONS**

Reuse or reprocess, if possible. Dispose in accordance with all applicable regulations. May be subject to disposal regulations: U.S. EPA 40 CFR 261. Hazardous Waste Number(s): D043.

## **14. TRANSPORT INFORMATION**

**U.S.DOT 49 CFR 172.101:**

Status: Not regulated

**CANADIAN TRANSPORTATION OF DANGEROUS GOODS:**

Status: Not regulated

## **15. REGULATORY INFORMATION**

### **U.S. REGULATIONS**

#### **OSHA REGULATORY STATUS:**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200) (US).

# OXYVINYL<sup>®</sup> PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.: 05

## 15. REGULATORY INFORMATION

### CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR 302.4):

If a release is reportable under CERCLA section 103, notify the state emergency response commission and local emergency planning committee. In addition, notify the National Response Center at (800) 424-8802 or (202) 426-2675.

Vinyl Chloride

1 lb. RQ

### EPCRA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30):

Not regulated

### EPCRA SECTIONS 311/312 HAZARD CATEGORIES (40 CFR 370.21):

None

### EPCRA SECTION 313 (40 CFR 372.65):

Not regulated.

### OSHA SPECIFICALLY REGULATED SUBSTANCES (ADDITIONAL INFORMATION / REFERENCE):

OSHA 29 CFR 1910.1017 (Vinyl chloride); The U.S. Department of Labor, Occupational Safety and Health Administration specifically regulates manufacturing, handling and processing of polyvinyl chloride. Such regulations have been published at 29 CFR 1910.1017. It is necessary that handlers and processors of polyvinyl chloride be familiar with these regulations. This resin may contain low levels of vinyl chloride. Under normal working conditions with adequate ventilation, neither the OSHA 8-hour TWA-PEL of 1.0 ppm, the 0.5 ppm action level, nor the C/STEL of 5.0 ppm should be exceeded. The workplace should be monitored, and if the level exceeds the PELs or action levels, refer to 29 CFR 1910.1017. In addition, all containers of PVC Resin shall be legibly labeled with the following warning: POLYVINYL CHLORIDE CONTAINS VINYL CHLORIDE. VINYL CHLORIDE IS A KNOWN HUMAN CARCINOGEN.

### OSHA PROCESS SAFETY (PSM) (29 CFR 1910.119):

Not regulated

## NATIONAL INVENTORY STATUS

U.S. INVENTORY STATUS (TSCA): All components are listed or exempt

TSCA 12(b): This product is not subject to export notification

CANADIAN DOMESTIC SUBSTANCE LIST (DSL/NDSL): All components are listed.

## STATE REGULATIONS

Ethene, chloro-, homopolymer (PolyVinyl Chloride)	
California Proposition 65 Cancer WARNING:	Not Listed
California Proposition 65 CRT List - Male reproductive toxin:	Not Listed
California Proposition 65 CRT List - Female reproductive toxin:	Not Listed
Massachusetts Right to Know Hazardous Substance List	Not Listed
New Jersey Right to Know Hazardous Substance List	Not Listed
New Jersey Special Health Hazards Substance List	Not Listed
New Jersey - Environmental Hazardous Substance List	Listed
Pennsylvania Right to Know Hazardous Substance List	Not Listed
Pennsylvania Right to Know Special Hazardous Substances	Not Listed
Pennsylvania Right to Know Environmental Hazard List	Not Listed

**OXYVINYLS® PVC HOMOPOLYMER SUSPENSION RESIN (PRIME GRADES)**

MSDS No.: M40722

Rev. Date: 07/17/2009

Rev. Num.: 05

<input type="checkbox"/>	Rhode Island Right to Know Hazardous Substance List	<input type="checkbox"/>	Not Listed
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**CANADIAN REGULATIONS**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Ethene, chloro-, homopolymer (PolyVinyl Chloride)			
<input type="checkbox"/>	Canada - CEPA Schedule 1 - Toxic Substance list	<input type="checkbox"/>	Not Listed
<input type="checkbox"/>	CANADIAN DOMESTIC SUBSTANCE LIST (DSL/NDL):	<input type="checkbox"/>	Listed
<input type="checkbox"/>	WHMIS Classification:	Uncontrolled product according to WHMIS classification criteria	

**16. OTHER INFORMATION**

HMIS: (SCALE 0-4) (Rated using National Paint & Coatings Association HMIS: Rating Instructions, 2nd Edition)

Health:	0*	Flammability:	1	Reactivity:	0
NFPA 704 - Hazard Identification Ratings (SCALE 0-4)					
Health:	0	Flammability:	1	Reactivity:	0

**Reason for Revision:**

1. Product Name and/or Trade Name(s) has been revised: SEE SECTION 1.

**IMPORTANT:**

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Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safety Data Sheet available to your employees.